



City of Seattle

Department of Planning and Development
D. M. Sugimura, Director

**CITY OF SEATTLE
ANALYSIS AND DECISION OF THE DIRECTOR
OF THE DEPARTMENT OF PLANNING AND DEVELOPMENT**

Application Number: 3011840

Applicant Name: Allison Hanson for Washington State Department of Transportation

Addresses of Proposal: 1099 Alaskan Way S.

SUMMARY OF PROPOSED ACTION

Shoreline Substantial Development Permit for tunnel boring from approximately S Main Street to Yesler Way. The depth of the bored tunnel within the Shoreline District ranges from 62 feet to 95 feet below ground surface. Project includes staging on Terminal 46 and Pier 48, actions to prevent or minimize settlement impacts due to tunnel boring, utility line relocation and replacement, and temporary roadway widening.

The Supplemental Draft Environmental Impact Statement (2010 SEIS) for the Alaskan Way Viaduct Replacement Project was released on Oct. 29, 2010, as endorsed by the Federal Highway Administration (FHWA), WSDOT and the City of Seattle. The EIS was made final on July 15, 2011.

The EIS examines potential environmental effects of the bored tunnel alternative, which would move SR 99 into a tunnel beneath downtown Seattle, reconnect the street grid at the ends of the tunnel, remove the viaduct along the waterfront and decommission the Battery Street Tunnel. The report builds on previous environmental analysis and brings the bored tunnel alternative to the same level of analysis as alternatives studied in 2004 and 2006 draft EIS reports.

The following approvals are required:

Shoreline Substantial Development Permit to allow development in the UH and UI Shoreline Environments, including special use approval.

SEPA - Conditioning pursuant to Seattle's SEPA policies. Chapter 25.05.660, Seattle Municipal Code.

SEPA DETERMINATION: ☐ Exempt ☐ DNS ☐ MDNS ☒ EIS*
☐ DNS with conditions
☐ DNS involving non-exempt grading, or demolition
or another agency with jurisdiction.

BACKGROUND DATA

Site and Vicinity Description

Within the Shoreline District, the proposed bored tunnel runs from S. Main Street to just north of Yesler Way and adjacent to Alaskan Way. The approximate 800-foot linear extent of the tunnel within the Shoreline District is entirely below grade, ranging from a depth of 62 feet below ground surface to 95 feet below ground surface. Current aboveground use of the property is a mix of private and public right-of-way (ROW) and includes street parking, street use, and a portion of the existing elevated roadway (Alaskan Way Viaduct) to be demolished under a separate permit.

Pier 48 and Terminal 46 are adjacent to one another and located west of Alaskan Way S. and the existing Alaskan Way Viaduct. Within the Shoreline District, the two sites extend from S. King Street north to S. Washington Street. The current use of Pier 48 includes upland contractor parking. The site is owned by Washington State Department of Transportation (WSDOT) and is within the Urban Harborfront (UH) shoreline environment with underlying zoning designation of Downtown Harborfront 1. The current use of Terminal 46 is a commercial and marine cargo terminal facility. The site is owned by the Port of Seattle and located in the Urban Industrial (UI) shoreline environment with underlying zoning designation of Industrial General 1. Surrounding land uses are limited to pedestrian use of the sidewalk and use of the uplands of Pier 48 for contractor parking.

The proposed staging area at Yesler Way/Western Avenue is a privately owned parcel (0.2 acre) located in the Urban Harborfront shoreline environment and is currently used as a commercial parking lot.

The proposed staging area along Alaskan Way between S. Jackson Street and Yesler Way is within the Urban Harborfront shoreline environment and located within street ROW.

The proposed staging area east of existing Alaskan Way Viaduct between Yesler Way and Madison Staging area is located within the Urban Harborfront shoreline environment and located within street ROW.

Proposal Description

The proposal is to construct a bored tunnel beneath downtown Seattle to replace the Alaskan Way Viaduct. This application is for the portion of the tunnel that will be located in the Shoreline District from approximately S. Main Street to north of Yesler Way. The depth of the proposed bored tunnel within the Shoreline District ranges from 62 feet to 95 feet below ground surface and length of approximately 800 feet. In addition to the tunnel boring, construction activities for this project that will occur in the Shoreline District include:

- Development activities associated with construction staging at the northern extent of Terminal 46 (approximately S. King Street north to Jackson Street).
- Settlement mitigation measures generally along Alaskan Way S. from approximately S. Main Street to Marion Street.
- Utility line replacement and relocation in the right-of-way generally along Alaskan Way S. from approximately S. Main Street to Columbia Street.
- Temporary road widening along Alaskan Way South from Yesler Way to approximately Spring Street.

Proposed use and development activities in the Urban Harborfront shoreline environment include:

- Construction of bored tunnel from approximately S. Main Street to just north of Yesler Way for approximately 800 linear feet of tunnel, ranging from a depth of 62 feet below ground surface to 95 feet below ground surface;
- Contractor parking on the dry land portion of Pier 48;
- Outdoor storage of construction materials and associated minor (nonground- or pier-disturbing) site preparation with the overwater section of Pier 48;
- Contractor parking at the Yesler Way/Western Avenue staging area;
- Staging and outdoor storage at staging area along Alaskan Way between S. Jackson Street and Yesler Way staging area in order to support proposed utility line work;
- Storage of construction materials for surface street compensation grouting materials and equipment and compensation grouting in area east of existing Alaskan Way Viaduct between Yesler Way and Madison staging area;
- Replacement and/or relocation of utility lines to mitigate for ground deformation caused by tunneling or excavation and relocation of existing utility lines. Existing utility lines likely to be affected by the project that fall within the UH environment occur along and adjacent to the existing Alaskan Way Viaduct between approximately S. Main Street and Columbia Street.
- Mandatory and unanticipated replacement/relocation of utility lines would be necessary to avoid or remedy damage caused by tunneling.

Mitigation measures are necessary to prevent or minimize settlement impacts resulting from tunnel boring activities to existing buildings and other structures, streets, sidewalks and utilities. The implementation of mitigation measures will occur above and below ground, and before, during and after construction. Implementation of settlement mitigation measures may occur on both public and private property and in varying locations with different land uses between S. Main Street and Marion St. on Alaskan Way S. The following potential settlement mitigation activities are proposed within the UH environment:

- Viaduct deformation mitigation activities consisting of ground improvements such as grouting and/or installation of micropile walls; structural strengthening, and foundation strengthening such as underpinning and/or foundation stiffening with concrete grade beams ;
- Compensation grouting would be performed to mitigate ground loss during tunneling beneath the structures where settlement is anticipated or detected during construction of the proposed bored tunnel. The current proposal for the grouting procedures would use two large-diameter (approximately 15-foot diameter) access shafts. The shafts would be drilled into the ground to facilitate the installation of an array of grout tubes under the existing building foundations. These shafts would extend to the base of the existing pile foundations, about 40 feet below grade. Grouting operations (mixers, pumps, and power units) would be located at the surface to service the drilling of the grout tubes. The access shafts are planned within the Shoreline District east of the Alaskan Way Viaduct between Yesler Way and Marion Street. Buildings requiring compensation grouting are located to the east, and outside of the Shoreline District.
- Ground modification improvements would likely be performed along the tunnel alignment to stabilize soft soils around the tunnel and mitigate for potential ground loss.

Within the Shoreline District, ground modification improvements include an area generally along the alignment of the existing Alaskan Way Viaduct between approximately S. Washington Street and Columbia Street. This includes the installation of separated drilled shafts and /or micropiles installed approximately every 3 to 5 feet from S. King Street to Yesler Way. An area of potential ground improvement extends to the Al Bocallino Building, located at corner of Yesler Way and Alaskan Way S, which would include installation of micropiles along the western side of the building.

The tunnel would have an outside diameter of approximately 58 feet and would be excavated by a pressurized-face Tunnel Boring Machine (TBM). The tunnel would be lined with precast concrete segments as the tunnel is excavated. The roadway would be constructed inside the tunnel liner and would consist of a double-deck structure.

Bored tunnel construction would likely occur in the following activity sequence:

- Procure TBM;
- Set up staging areas to support tunnel excavation and internal construction;
- Excavate tunnel and install permanent lining system for ground support as excavation proceeds;
- Construct internal structure and configuration of roadways, egress passages, and ventilation ducts;
- Install embedded components for tunnel systems, including fire and life safety and directional information signage. Fire and life safety systems for the tunnel include power, lighting, ventilation, fire alarm, sprinkler system, traffic signals, and communications.

During construction of the project, only a single southbound lane of S. Alaskan Way would be available for ferry traffic. A second northbound lane of traffic is proposed between Yesler Way and Spring Street. Temporary roadway widening elements for this project include:

- Widening the existing roadway along S. Alaskan Way approximately 11 feet to the west, covering the existing trolley tracks with Hot Mix Asphalt. The existing bike path and railing located to the east would remain in place. If the ballasts and railroad ties need to be removed, approximately 2 feet of excavation may be required.
- Installation of a temporary chain link fence along the existing railing to separate the bike path from the project area.
- Cover three to four existing roadway inlets and new inlets would be created along the new curbside and connected laterally to the existing drainage system.
- Relocate the existing timber poles and elevated wires to the east approximately 10 feet and luminaries may be installed directly on the existing Alaskan Way Viaduct.
- Demolish the Madison Street Clam Central Station;
- Return site to pre-project condition barring any other use by the City, including the trolley tracks and Madison Street Clam Central Station.

Proposed use and development activities within the Urban Industrial shoreline environment include:

Various construction-related activities are planned for Terminal 46, which is located in the Urban Industrial environment, including:

- Installation and operation of conveyance system for transfer of material/spoils onto barges. Spoils would be removed through the south portal area (outside of the Shoreline District) using conveyors or pipes and transported to Terminal 46 for stockpiling before being transported by barge to an appropriate, permitted disposal facility.
- Storage of construction material, such as tunnel-liner segments and precast concrete panels, and storage of tunnel spoils to allow water to decant prior to loading to a barge and shipping to an appropriate, permitted disposal facility.
- Demolition of portion of northeast maintenance building on Terminal 46 and storage sheds.
- Installation and operation of crane as part of conveyance system on Terminal 46.
- Installation of a fence to divide the western edge of the staging area from the terminal operation. The fencing dimensions and quality would match the existing terminal security fencing.
- Installation of a storage area for “hides” storage near container bay row A300. Hides is an abbreviated term that refers to the shipment of containers containing animal hides that are shipped to Asia for tanning and processing into leather goods. A new location is required for this existing use due to the proposed use of Terminal 46 for this project. This action would include construction of 250 linear feet of trench drain, installation of conveyance piping, a collection manhole, two gate valves; installation of piping with connections to the sanitary sewer and storm drain system; repair of any pavement removed or damaged during installation activities.
- Relocation of existing crane maintenance building from north marine building to container bay A400. This action would include the following elements: construction of new 2,700-square-foot building with a 120 square-foot office, 120 square-foot locker room, restroom, 120 square-foot parts storage room, mechanical room, and primary work bay, which would provide storage for the crane and include a 14-foot-wide by 16-foot-tall rolling access door and building systems to accommodate various activities, including welding; and installation of all power, data, and civil utilities required for a functional structure.
- Existing grounded reefer racks in row C100 would need to be converted from two-high grounded reefers to four-high grounded reefers. Reefer racks are refrigerated cargo containers designed to carry perishable freight at specific temperatures. Activities for this conversion include: removal of existing receptacles and bollards; installation of 11 “racks” 37 feet high by 8 feet wide by 75 feet long; construction of a proposed electrical substation would be located under one of the racks.
- Contractor may elect to demolish the north 50 feet of the existing maintenance and repair building. If this occurs, the portion of the building south of the section being demolished would need to be protected from damage and shored up to the extent necessary for safe occupancy and continued use by the terminal operator. Following construction, the area would be paved and uniformly sloped to drain.

- Upon completion of use of the staging area on Terminal 46, the contractor would restore the secure terminal fence line to the pre-use alignment; demolish the existing north marine building and pave area; repair any areas of significant settlement to the grade and slope prior to use; remove crane 54 from the site; replace two steel frame storage buildings at the north end of Terminal 46 with structures of equal dimension and access; repair any utilities damaged by contractor during use of area.

WSDOT estimates that project will require 53 months for completion, which includes project closeout, cleanup, dismantling, staging areas, and permit required for site restoration.

Public Comments

The comment period for this project ended on March 11, 2011. One public comment was received that was in favor the project and timely issuance of permit.

ANALYSIS - SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT

The proposal is located within the following Shoreline Environments as designated by the Seattle Shoreline Master Program (SSMP): Urban Industrial (UI) and Urban Harborfront (UH). The Shoreline Master Program, Chapter 23.60 of the Seattle Municipal Code, regulates use and development in the City's shoreline districts to implement the policy and provisions of the Shoreline Management Act of 1971 and the Shoreline Goals and Policies.

The SSMP requires that a shoreline permit be obtained prior to the undertaking of any substantial development within a shoreline environment. SMC Section 23.60.030 includes criteria for evaluating a shoreline permit. A substantial development permit shall be issued only when the development proposed is consistent with:

- A. The policies and procedures of Chapter 90.58 RCW;
- B. The regulations of this Chapter; and
- C. The provisions of Chapter 173-27 WAC.

Conditions may be attached to the approval of a permit as necessary to assure consistency of the proposed development with the Seattle Shoreline Master Program and the Shoreline Management Act.

A. THE POLICIES AND PROCEDURES OF CHAPTER 90.58.RCW

The State of Washington Shoreline policies (RCW Chapter 90.58) provide for the control of pollution and prevention of damage to the natural environment, and for the protection of the resources and ecology of the shoreline over the long term. It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. The Shoreline Management Act of 1971 provides definitions and concepts, and gives primary responsibility for initiating and administering the regulatory program of the Act to local governments. The Department of Ecology is to primarily act in a supportive and review capacity, with primary emphasis on insuring compliance with the policy and provisions of the Act. As a result of this Act, the City of Seattle adopted a local shoreline master program,

codified in the Seattle Municipal Code at Chapter 23.60 that also incorporates the provisions of Chapter 173.27 WAC. Development on the shorelines of the State is not to be undertaken unless it is consistent with the policies and provisions of the Act, and with the local master program. The Act sets out procedures, such as public notice and appeal requirements, and penalties for violating its provisions.

The City of Seattle Shoreline policies incorporate these goals by reference and include area objectives pursuant to these goals. These policies contemplate protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting public rights of navigation and corollary incidental rights. Permitted uses in the shorelines shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water.

As discussed below, the City's Shoreline policies encourage public access and discourage disrupting the shoreline environment. This proposal is consistent with the policies and procedures of the RCW Chapter 90.58.

B. THE REGULATIONS OF CHAPTER 23.60

The regulations of SSMP Section 23.60.064 require that the proposed use: 1) conform to all applicable development standards of both the shoreline environment and underlying zoning; 2) be permitted in the shoreline environment and the underlying zoning district 3) satisfy the criteria of shoreline variance, conditional use, and/or special use permits as may be required and 4) SMC 23.60.014 C. for standards applicable to environmentally critical areas as provided in Seattle Municipal Code Chapter 25.09, Regulations for Environmentally Critical Areas, shall apply in the Shoreline District. If there are any conflicts between the Seattle Shoreline Master Program and Seattle Municipal Code Chapter 25.09, the most restrictive requirements shall apply.

The underlying zoning for Pier 48 and adjacent upland areas is Downtown Harborfront 1. Per SMC 23.49.300 A., "uses that shall be permitted or prohibited in Downtown Harborfront 1 are determined by the Seattle Shoreline Master Program." The analysis below demonstrates the proposal is consistent with shoreline uses allowed in by the City of Seattle's Shoreline Master Program and therefore consistent with the Downtown Harborfront 1 underlying zoning.

The underlying zoning for Terminal 46 is Industrial General 1 (IG1). Cargo Terminal, Outdoor Storage and Utility Service uses are permitted uses in IG1 per SMC 23.50.012.

SMP 23.60.004 - Shoreline Policies

Policies governing approval of development in shoreline districts are set out in the Land Use Element of the Seattle Comprehensive Plan. Seattle's Comprehensive Plan Shoreline Goals and Policies encourage improved public access along shorelines. Goal LUG 46 promotes development of "a transportation network that supports and enhances use of and access to the shorelines." The proposed tunnel and viaduct replacement will allow for greater opportunities than currently exist for the public to access and enjoy the shoreline environment along the waterfront and upon completion, the project will enhance the functional and aesthetic qualities of

the shoreline environment (LUG 47). The project's intended transportation improvements in the downtown area are also consistent with Transportation Policy 50 from the Comprehensive Plan, which aims to "Promote an intermodal freight transportation strategy, including rail, truck, air and water transport and advocate for improved freight and goods movement. Work toward improved multi-modal connections among rail yards, industrial areas, airports, and regional roadways."

Effective Date of Shoreline Permit

Seattle's SMP allows the Director to adopt different time limits for the life of a shoreline substantial development permit. SMC 23.60.074.A states that : *" Upon finding of good cause, based on the requirements and circumstances of the project proposed and consistent with the policy and provisions of WAC 173-27 and this chapter, the Director may adopt different time limits from those set forth ...this section ... as part of the decision on a shoreline substantial development permit... "Good cause, based on the requirements and circumstances of the project," means that the time limits established are reasonably related to the time actually necessary to perform the development on the ground and complete the project that is being permitted, and/or are necessary for the protection of shoreline resources. "*

The applicant has requested an extension to the standard time limits applicable to shoreline substantial development permits. Given the scope of the proposed project, the construction of the tunnel and active use of the staging area within the shoreline area is expected to occur until winter of 2015. Due to the unusual scale and complexity of constructing a bored tunnel, it is determined that the proposed extension of the time line is granted.

Shoreline Development Standards

The proposed shoreline development is located in the UI and UH Shoreline Environments. Pursuant to the Seattle Shoreline Master Plan, the proposed action is subject to the:

1. general development standards (SMC 23.60.152);
2. development standards for uses in the UI and UH environments (SMC 23.60.840 SMC 23.60.660).

1. SMC 23.60.152 - General Development Standards for all Shoreline Environments

General standards for all uses and development in all shoreline environments are established in SMC Section 23.60.152. Generally, these standards require that all shoreline activity be designed, constructed, and operated in an environmentally sound manner consistent with the Shoreline Master Program and with best management practices for the specific use or activity, in order to have minimal impact on the shoreline environment. The following general development standards are relevant to the proposed project:

- A. *The location, design, construction and management of all shoreline developments and uses shall protect the quality and quantity of surface and ground water on and adjacent to the lot and shall adhere to the guidelines, policies, standards and regulations of applicable water quality management programs and regulatory agencies. Best management practices such as paving and berming of drum storage areas, fugitive dust controls and other good housekeeping measures to prevent contamination of land or water shall be required.*

Possible negative impacts to surface and ground water quality could result from construction of this project due to earthwork, concrete work, paving, stockpiling, erosion of disturbed soils or soil stockpiles by stormwater runoff, fugitive dust from demolition, equipment leaks or spills, material transport, storm drainage and/or combined sewer utility work, and dewatering. If not properly controlled through use of Best Management Practices, these project actions could result in construction-related pollutants that could increase turbidity and pH in portions of Elliott Bay as well as affect other water quality parameters, such as the amount of available oxygen in the water.

The project will employ numerous Best Management Practices and mitigation measures to protect groundwater and surface water quality, which are discussed below and in much more substantial detail in the SEIS and FEIS and, in particular, the Earth Discipline Report (Appendix P); Surface Water Discipline Report (Appendix O); and Hazardous Materials Discipline Report (Appendix Q).

These measures include that construction-related runoff and dewatering would be discharged to the combined sewer system for treatment at the West Point WWTP. The project would need to obtain wastewater discharge permit approval from King County before discharging construction stormwater or dewatering water to the combined sewer. Also, the project would need to obtain an NPDES construction stormwater permit from Department of Ecology if water associated with construction is proposed to be discharged to a separated sewer or to surface waters. Before discharge to either the combined sewer or the separate storm drain, stormwater runoff from active construction areas would be treated as necessary to meet the requirements of the King County and state permits. Any dewatering water that reaches contaminant thresholds would have to be treated to the acceptable standards of the King County Wastewater Discharge Permit or Authorization before being discharged to the combined sewer system, or it would have to be disposed of at an approved off-site hazardous waste facility.

Construction effects on surface water would be avoided, minimized, and mitigated, and the amount of required treatment would be minimized and mitigated by the development, implementation, and ongoing updating of certain management plans, listed and summarized in Appendix O of the SEIS and FEIS:

- **Construction Stormwater Pollution Prevention Plan.** This plan will describe overall BMPs, including location, size, maintenance requirements, and monitoring; specify methods for handling dewatering water, including storage, treatment, and discharge or disposal; discuss fugitive dust control, including surface protection and wetting techniques; outline flow control, including methods for routing off-site stormwater around the construction area and for controlling on-site stormwater discharges; address detention requirements and protocols to meet requirements and maintain existing conveyance system capacity; describe temporary water quality treatment for on-site stormwater runoff and/or dewatering water, including methods, location, and treatment goals; specify storm drain protection, maintenance, and monitoring; provide a list of Certified Erosion and Sediment Control Leads who would monitor and manage implementation and maintenance of BMPs; and outline water quality monitoring requirements, including location, frequency, and reporting. This plan would serve as the overall stormwater mitigation plan and would include each of the plans discussed below as appendices:

- Temporary Erosion and Sediment Control Plan: This plan would outline the design and construction specifications for BMPs to be used to identify, reduce, eliminate, or prevent sediment and erosion problems.
- Spill Prevention, Control, and Countermeasures Plan: This plan would outline requirements for spill prevention, inspection protocols, equipment, material containment measures, and spill response procedures.
- Concrete Containment and Disposal Plan: This plan would outline the management, containment, and disposal of concrete and discuss BMPs that would be used to reduce high pH.
- Dewatering Plan. This plan would outline the management, containment, and disposal of concrete debris, slurry, and dust and discuss BMPs that would be used to reduce high pH.
- Fugitive Dust Plan. This plan would outline measures to prevent generation of fugitive dust from exposed soil, construction traffic, and material stockpiles.

In addition, a Contaminated Soil Management Plan (CSMP) will be developed by the contractor to address details, including all BMPs, for handling and disposal of known and unanticipated contaminated soil material and spoils.

Completed Construction Stormwater Pollution Prevention Plan and appendices as well as all portions of CSMPs relevant to activities in the Shoreline District shall be provided to DPD prior to issuance of any building permit for this project in the Shoreline District. The contractor will also prepare and implement an Environmental Compliance Plan (ECP) that identifies roles and responsibilities of key personnel, procedures for environmental compliance, procedures to identify and correct non-compliance events, and procedures for emergency response. The ECP will be provided to DPD prior to issuance of any building permits in this project area, as well as stored in a format easily accessible by WSDOT and the regulatory agencies. A copy shall be maintained at the contractor's construction office and on-site at the project. Furthermore, construction authorized by building permits for the construction activities at Terminal 46 and Pier 48, described in this document, will be subject to regular inspections by DPD personnel and/or DPD-authorized personnel to ensure compliance with environmental protection measures described in detail in the Construction Stormwater Pollution Prevention Plan and ECP, summarized above.

B. Solid and liquid wastes and untreated effluents shall not enter any bodies of water or be discharged onto the land.

Best management practices will be implemented to prevent such discharges (see discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan). Excess or water materials generated during construction would not be allowed to enter waters of the State. The contractor is required to retrieve any floating debris generated during construction. This debris will be retrieved using a skiff and net, and disposed of at an appropriate upland facility. All tunneling will occur more than 60 feet below the ground surface in the Shoreline District and no in-water-work will be required. Depending on the level and type of contamination (clean, low, or greater than MTCA Method A cleanup levels), the spoils may be transported to a land reclamation facility or a RCRA Subtitle D landfill. Dangerous waste must be disposed of at a RCRA Subtitle C landfill.

Relevant BMPs and mitigation measures are discussed in substantial detail in the SEIS, FEIS and, in particular, the Earth Discipline Report (Appendix P); Surface Water Discipline Report (Appendix O); and Hazardous Materials Discipline Report (Appendix Q). See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

- D. The release of oil, chemicals or other hazardous materials onto or into the water shall be prohibited. Equipment for the transportation, storage, handling or application of such materials shall be maintained in a safe and leakproof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected.*

No petroleum products, fresh cement, lime or concrete, chemicals or other toxic or deleterious materials that may be used during construction will be allowed to enter surface waters. Equipment in use at the staging and construction areas will be maintained in a safe and leak-proof condition and will be inspected regularly. Appropriate repairs will be made to prevent the release of such materials. Relevant BMPs and mitigation measures are discussed in substantial detail in the SEIS, FEIS and, in particular, the Earth Discipline Report (Appendix P); Surface Water Discipline Report (Appendix O); and Hazardous Materials Discipline Report (Appendix Q). See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan and, in particular, Spill Prevention, Control, and Countermeasures Plan.

- E. All shoreline developments and uses shall minimize any increases in surface runoff, and control, treat and release surface water runoff so that receiving water quality and shore properties and features are not adversely affected. Control measures may include, but are not limited to, dikes, catch basins or settling ponds, interceptor drains and planted buffers.*

Stormwater management will be provided for the project and at the construction staging areas in accordance with applicable requirements. The contractor is responsible for the preparation and implementation of a Spill Prevention, Control and Countermeasure (SPCC) plan to be used for the duration of the proposed project. Relevant BMPs, including this SPCC plan, and mitigation measures are discussed in substantial detail in the SEIS, FEIS and, in particular, the Earth Discipline Report (Appendix P); Surface Water Discipline Report (Appendix O); and Hazardous Materials Discipline Report (Appendix Q). See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

- F. All shoreline developments and uses shall utilize permeable surfacing where practicable to minimize surface water accumulation and runoff.*

Construction of the bored tunnel within the Shoreline District will range from a depth of 62 feet below ground surface (where the tunnel enters the Shoreline District) to 95 feet below ground surface (where the tunnel exits the Shoreline District) and so this development standard is not applicable. With respect to work in the staging areas, relevant BMPs, including the SPCC plan, and mitigation measures are discussed in substantial detail in the SEIS, FEIS and, in particular, the Earth Discipline Report (Appendix P) and Surface Water Discipline Report (Appendix O). See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

- G. All shoreline developments and uses shall control erosion during project construction and operation.*

The contractor for the project is responsible for the preparation and implementation of a Temporary Erosion and Sediment Control Plan, as described in more detail in the SEIS, FEIS and Appendix O (Surface Water Discipline Report). Other relevant BMPs and mitigation measures are discussed in substantial detail in the SEIS and, in particular, the Earth Discipline Report (Appendix P). See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

- H. All shoreline developments and uses shall be located, designed, constructed and managed to avoid disturbance, minimize adverse impacts and protect fish and wildlife habitat conservation areas including, but not limited to, spawning, nesting, rearing and habitat areas, commercial and recreational shellfish areas, kelp and eel grass beds, and migratory routes. Where avoidance of adverse impacts is not practicable, project mitigation measures relating the type, quantity and extent of mitigation to the protection of species and habitat functions may be approved by the Director in consultation with state resource management agencies and federally recognized tribes.*

Possible negative construction effects on natural resources in the Shoreline District from this project would most likely be associated with potential surface water quality impacts from handling of excavation spoils and the stockpiling and dewatering processes and controlling erosion and potential pollutant sources. As discussed above, possible negative impacts to surface water quality could result from construction of this project due to earthwork, concrete work, paving, stockpiling, erosion of disturbed soils or soil stockpiles by stormwater runoff, fugitive dust from demolition, equipment leaks or spills, material transport, storm drainage and/or combined sewer utility work, and dewatering. If not properly controlled through use of Best Management Practices, construction-related pollutants could increase turbidity and pH in portions of Elliott Bay as well as affect other water quality parameters, such as the amount of available oxygen in the water, and these reductions in water quality could have negative impacts on habitat for fish and other aquatic species and wildlife that utilize the nearshore environment. Increased artificial light during construction could also have negative impacts on fish and wildlife that utilize this area. These potential impacts are discussed in the EIS and in particular, Appendix N.

Best management practices will be employed during construction and operation of the project for protection of fish and wildlife habitat along the Seattle shoreline and nearshore environment of Elliott Bay, as described in more detail in the SEIS, FEIS and, in particular, Appendix N (Wildlife, Fish and Vegetation Discipline Report), Appendix O (Surface Water Discipline Report), Earth Discipline Report (Appendix P); and Hazardous Materials Discipline Report (Appendix Q). Measures to reduce light impacts that will be employed during project include use of shielding wherever possible to minimize spillage of light into aquatic habitats and focusing use of lights to immediate works zones so as to minimize effects of lights on adjacent habitat areas. With respect to potential surface water quality impacts, please see discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

- I. All shoreline developments and uses shall be located, designed, constructed and managed to minimize interference with or adverse impacts to beneficial natural shoreline processes such as water circulation, littoral drift, sand movement, erosion and accretion.*

Neither the tunnel construction nor the staging area use within the Shoreline District will require permanent development that would negatively impact natural shoreline processes such as water circulation, littoral drift, sand movement, erosion and accretion. The staging areas will be designed and managed to minimize interference with or adverse impacts to beneficial natural shoreline processes, primarily through the use of BMPs to minimize and prevent impacts to surface water quality through the handling and movement of spoils and construction debris at Terminal 46 and Pier 48. Relevant BMPs and mitigation measures are discussed in substantial detail in the SEIS, FEIS and, in particular, the Wildlife, Fish and Vegetation Discipline Report (Appendix N). See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

- J. All shoreline developments and uses shall be located, designed, constructed and managed in a manner that minimizes adverse impacts to surrounding land and water uses and is compatible with the affected area.*
- K. Land clearing, grading, filling and alteration of natural drainage features and landforms shall be limited to the minimum necessary for development. Surfaces cleared of vegetation and not to be developed shall be replanted. Surface drainage systems or substantial earth modifications shall be professionally designed to prevent maintenance problems or adverse impacts on shoreline features.*

Relevant BMPs and mitigation measures for consistency with these general development standards (J and K) are discussed in substantial detail in the SEIS, FEIS and, in particular, the Earth Discipline Report (Appendix P); Land Use Discipline Report (Appendix G); Surface Water Discipline Report (Appendix O). See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

- L. All shoreline development shall be located, constructed and operated so as not to be a hazard to public health and safety.*

The development of the tunnel within the Shoreline District will not result in hazards to public health and safety. The staging and construction areas and the tunnel itself will be developed and operated in accordance with applicable safety standards and regulations. The project site and staging areas shall be appropriately secured to prevent potential hazards to public health and safety. See discussion about traffic

- M. All development activities shall be located and designed to minimize or prevent the need for shoreline defense and stabilization measures and flood protection works such as bulkheads, other bank stabilization, landfills, levees, dikes, groins, jetties or substantial site regrades.*

Neither the tunnel development nor the staging area use within the Shoreline District will require the implementation of such measures.

- N. *All debris, overburden and other waste materials from construction shall be disposed of in such a way as to prevent their entry by erosion from drainage, high water or other means into any water body.*

Potential impacts of construction-related pollutants and/or erosion are summarized above and discussed in more detail in the relevant EIS documents. The contractor will provide for the disposal of all debris and other waste material associated with the proposed facilities, including tunnel spoils, in a manner that prevents their entry into any water body. The Terminal 46 area will be used, as described in more detail in the project description, for the movement of demolition debris and/or excavation spoils. Barge use is expected to average one barge trip per day. The material would then be transported to a facility that is permitted to accept the material. If contaminant concentrations exceed the dangerous waste criteria, the material would require disposal at a RCRA Subtitle C landfill. Handling, storage, and transport measures would need to comply with RCRA. Contained-out designated soil can be taken to a Subtitle D landfill. The EIS and, in particular, the Hazardous Materials Discipline Report (Appendix Q) contains much more detailed discussion about the handling and disposal of hazardous material that may be encountered during this project. In addition, a specific CSMP will be developed to address specific measures for handling and disposal of known and unanticipated contamination.

Relevant BMPs and mitigation measures are discussed in substantial detail in the SEIS, FEIS and, in particular, the Earth Discipline Report (Appendix P); Surface Water Discipline Report (Appendix O) and Hazardous Materials Discipline Report (Appendix Q). See also discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan.

2. SMC 23.60.690 and 23.60.870 - Development Standards in the UH and UI Environments

Development Standards in the Urban Harborfront (UH) Environment

In addition to development standards applicable to all environments contained in the General Provisions subchapter, developments in the Urban Harborfront Environment shall be located and designed to encourage economically viable water-dependent uses to meet the needs of waterborne commerce, facilitate the revitalization of Downtown's waterfront, provide opportunities for public access and recreational enjoyment of the shoreline, preserve and enhance elements of historic and cultural significance and preserve views of Elliott Bay and the land forms beyond, which are consistent with the goals and objectives of the viaduct replacement project for a safe transportation corridor in this area of downtown Seattle.

The development standards set forth in the Urban Harborfront (UH) Environment relate to height, maximum size limits, lot coverage, view corridors, regulated public access, and location of uses (SMC 23.60.690). The proposed development has been reviewed and is consistent with these development standards, where applicable.

The proposed uses for this project in the UH Environment area described in more detail above and are generally limited to the bored tunnel and construction activities and development associated with the tunnel.

The bored tunnel within the Shoreline District is a permitted use on upland lots in the UH Environment per SMC 23.60.670 (A) (1) and SMC 23.60.660 (D). Contractor parking within the upland property of Pier 48 and at the Yesler Way/Western Avenue staging area is permitted per SMC 23.60.660 (B) (2). Staging and outdoor storage of construction materials at the identified staging areas for this project (as described above) is permitted as clearly incidental and necessary for the construction of permitted uses (i.e., street, utility lines/services). The proposed utility line work (described above) is permitted as a special use per SMC 23.60.662 (A) (2) (See analysis below). The temporary road widening is permitted per SMC 23.60.670 (A) (1) and SMC 23.60.660 (D). The temporary chain link fence is permitted as clearly incidental and necessary for the construction of a permitted use.

Development Standards in the Urban Industrial (UI) Environment

In addition to development standards applicable to all environments contained in the General Provisions subchapter, developments in the Urban Industrial Environment shall be located and designed to provide for efficient use of industrial shorelines by major cargo facilities and other water-dependent and water-related industrial uses, which is consistent with the goals and objectives of the viaduct replacement project for a safe transportation corridor in this area of downtown Seattle.

Development standards in the UI environment regulate critical habitat protection, height, lot coverage, view corridors, and regulated public access. The proposed development has been reviewed and is consistent with these development standards, where applicable.

The proposed uses for this project in the UI Environment are described in more detail above but are generally limited to the construction activities, staging, and tunnel spoil and construction material handling and movement that will occur at Terminal 46.

The proposed crane, crane maintenance building, reefer rack development, conveyance system for transfer of material/spoils onto barges, modification of the existing repair and maintenance building, all planned for Terminal 46 (and described above) is a permitted use in UI Environment per SMC 23.60.840 (D) (5). The proposed storage of construction material and tunnel spoils in the UI Environment and at Terminal 46 are permitted per SMC 23.60.840(C)(2).

C. THE PROVISIONS OF CHAPTER 173-27 WAC

Chapter 173-27 WAC sets forth permit requirements for development in shoreline environments, and gives the authority for administering the permit system to local governments. The State acts in a review capacity. The Seattle Municipal Code Section 23.60 (Shoreline Development) incorporates the policies of the WAC by reference. These policies have been addressed in the foregoing analysis and have fulfilled the intent of WAC 173-27.

DECISION - SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT

The proposed shoreline substantial development permit is **CONDITIONALLY GRANTED**. Shoreline Substantial Development conditions are listed below.

ANALYSIS – SHORELINE SPECIAL USE

The UH environment allows utility line uses as a shoreline special use (SMC 23.60.662) subject to criteria for special uses which are described in SMC 23.60.032 and indicates that the Director may approve or conditionally approve a special use only if the applicant can demonstrate all of the following:

A. That the proposed use will be consistent with the policies of RCW 90.58.020 and the Shoreline Policies;

The policies of the RCW 90.58.020 provide for management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses, while allowing development in a manner which will promote the public interest. It states, in part: permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize , insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water.

The proposed construction and operation of the utility line relocation or replacement will preserve the natural character of the shoreline by relocating the utilities in a manner that does not cause environmental harm; protects the resources and ecology of the shoreline by including best management practices to avoid harm to the shoreline, and maintain public access to publicly-owned areas of the shorelines and maintain recreational opportunities for the public in the shoreline by not altering any access or recreational opportunities that are currently available. To the extent practicable, all relocated or replaced utility lines will be located or constructed within existing utility corridors. Upon completion of utility line relocation or replacement, the shoreline will be restored to pre-project conditions.

B. That the proposed use will not interfere with the normal public use of public shorelines;

The relocation or replacement of utility lines would not interfere with normal public use of public shorelines. Temporary obstructions include placement of temporary equipment during construction to support utility installation or relocation in the Shoreline District. The equipment will meet the height requirements of SMC 23.60.692 and will not result in damage to the ecology and environment of the shoreline area or interfere with the public's use of the water.

All project nighttime noise levels will meet the requirements of the City of Seattle Noise Ordinance, SMC 25.08, and the Project's Major Public Project Construction Variance. Pedestrian and business access will also be maintained per any required Street Use Permit(s) acquired for the project.

C. That the proposed use of the site and design of the project will be compatible with other permitted uses within the area;

The replacement or relocation of utility lines is necessary to avoid direct conflicts or avoid/remedy damage caused by construction of the Project and is compatible with other authorized uses in the area. The final replacement or relocation of the utility lines would be to current standards and in the same or general vicinity of the existing utility lines.

Following the replacement or relocation of utility lines within the Shoreline District, the ground surface will be restored to the pre-construction condition according to the Street and Sidewalk Pavement Opening and Restoration Rule (SDOT Rule 5-2009) and coordinated through the Seattle Department of Transportation Street Use Permit issued to the Project.

D. That the proposed use will cause no unreasonably adverse effects to the shoreline environment in which it is to be located; and

Best Management Practices, as described above and in the EIS documents, will be used to prevent impacts to waters of the state. By following these BMPs and WSDOT standard specifications and abiding by all other permit conditions, the proposed use would cause no significant adverse effects to the shoreline environment. See also discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan and the ECP.

E. That the public interest suffers no substantial detrimental effect.

The public interest is not expected to suffer substantial detrimental effect; therefore, the proposal meets the criteria for Special Use approval.

ANALYSIS – STATE ENVIRONMENTAL POLICY ACT (SEPA)

The 2010 SDEIS and Final EIS analyzed the Bored Tunnel Alternative. The information in the EIS documents, supplemental information provided by the applicant (plans, further project descriptions), and the experience of the City with review of similar projects form the basis for this analysis and decision.

The SEPA Overview Policy (SMC 25.05.665) establishes the relationship among codes, policies, and environmental review. Specific policies for specific elements of the environment, certain neighborhood plans, and other policies explicitly referenced may serve as the basis for exercising substantive SEPA authority. The Overview Policy states in part:

"[W]here City regulations have been adopted to address an environmental impact; it shall be presumed that such regulations are adequate to achieve sufficient mitigation" (subject to some limitations).

Under certain limitations/circumstances (SMC 25.05.665 D 1-7) additional mitigation can be considered. Thus, a more detailed discussion of some of the impacts is cited below.

Short-term Impacts

A number of temporary or construction-related impacts are expected from this project, which are discussed in detail in the SEIS (Chapter 6) and relevant Appendices.

Several adopted City codes and/or ordinances provide mitigation for some of the identified impacts. Specifically these are: Stormwater, Grading and Drainage Control Code (grading, site excavation and soil erosion); Street Use Ordinance (watering streets to suppress dust, removal of debris, and obstruction of the pedestrian right-of-way); the Building Code (construction

measures in general); and the Noise Ordinance (construction noise). In addition Federal and State regulations and permitting authority are effective to control short-term impacts on water quality. Compliance with these applicable codes and ordinances will reduce or eliminate most of the short-term impacts to the environment. Some of these impacts are further discussed below.

Air Quality

Construction impacts for the project are discussed in Chapter 6 of the SEIS (2010) and Appendices, including Appendix N (Air Discipline Report). Air quality effects from construction of the Bored Tunnel Alternative would occur primarily as a result of emissions from heavy-duty construction equipment (such as bulldozers, backhoes, and cranes), diesel-fueled mobile sources (such as trucks, brooms, and sweepers), diesel- and gasoline-fueled generators, and on- and offsite project-related vehicles (such as service trucks and pickups). Chapter 6 of the Air Discipline Report addresses construction-related air quality impacts from the project, including the results of two analyses that were conducted to evaluate the potential effects during project-related construction. One was a quantitative mobile source analysis to estimate potential effects associated with changes in traffic conditions during major construction (as a result of both changes in traffic patterns during major phases of construction and construction-related trucking activities on the local roadway network). The other was a qualitative analysis of potential effects associated with emissions from dust-generating activities, operation of heavy-duty diesel equipment, and trucking activities within major construction areas. Chapter 6 also included description and discussion of mitigation measures to address the potential impacts identified in these analyses, including implementation of WSDOT's Memorandum of Understanding with Puget Sound Clean Air Agency (PSCAA) to comply with PSCAA regulations that require dust control during construction and to prevent deposition of mud on paved streets. No additional mitigation pursuant to SEPA is warranted.

Greenhouse Gas Impacts

Construction activities including construction worker commutes, truck trips, the operation of construction equipment and machinery, and the manufacture of the construction materials themselves result in increases in carbon dioxide and other greenhouse gas emissions that adversely impact air quality and contribute to climate change and global warming. The analyses described above in Chapter 6 of the Air Discipline Report address project-related impacts due to greenhouse gas emissions. Mitigation measures are discussed in Chapter 6 to reduce and mitigate for these impacts. No additional mitigation pursuant to SEPA is warranted.

Surface Water Quality

Construction impacts for the project are discussed in Chapter 6 of the SEIS (2010) and Appendices, including Appendix O (Surface Water Quality Discipline Report) and Appendix Q (Hazardous Materials Discipline Report). Temporary construction-related effects on water quality and mitigation for these effects are addressed in more detail in Chapter 6 of Appendix O.

Construction-related runoff and dewatering would be discharged to the combined sewer system for treatment at the West Point WWTP. The project would need to obtain wastewater discharge permit approval from King County before discharging construction stormwater or dewatering water to the combined sewer. Also, the project would need to obtain an NPDES construction

stormwater permit from Department of Ecology if water associated with construction is proposed to be discharged to a separated sewer or to surface waters. Before discharge to either the combined sewer or the separate storm drain, stormwater runoff from active construction areas would be treated as necessary to meet the requirements of the King County and state permits. Any dewatering water that reaches contaminant thresholds would have to be treated to the acceptable standards of the King County Wastewater Discharge Permit or Authorization before being discharged to the combined sewer system, or it would have to be disposed of at an approved off-site hazardous waste facility.

Construction effects on surface water would be avoided, minimized, and mitigated, and the amount of required treatment would be minimized and mitigated by the development, implementation, and ongoing updating of certain management plans, listed and summarized in Appendix 0 of the SEIS and FEIS:

- **Construction Stormwater Pollution Prevention Plan.** This plan will describe overall BMPs, including location, size, maintenance requirements, and monitoring; specify methods for handling dewatering water, including storage, treatment, and discharge or disposal; discuss fugitive dust control, including surface protection and wetting techniques; outline flow control, including methods for routing off-site stormwater around the construction area and for controlling on-site stormwater discharges; address detention requirements and protocols to meet requirements and maintain existing conveyance system capacity; describe temporary water quality treatment for on-site stormwater runoff and/or dewatering water, including methods, location, and treatment goals; specify storm drain protection, maintenance, and monitoring; provide a list of Certified Erosion and Sediment Control Leads who would monitor and manage implementation and maintenance of BMPs; and outline water quality monitoring requirements, including location, frequency, and reporting. This plan would serve as the overall stormwater mitigation plan and would include each of the plans discussed below as appendices:
- **Temporary Erosion and Sediment Control Plan:** This plan would outline the design and construction specifications for BMPs to be used to identify, reduce, eliminate, or prevent sediment and erosion problems.
- **Spill Prevention, Control, and Countermeasures Plan:** This plan would outline requirements for spill prevention, inspection protocols, equipment, material containment measures, and spill response procedures.
- **Concrete Containment and Disposal Plan:** This plan would outline the management, containment, and disposal of concrete and discuss BMPs that would be used to reduce high pH.
- **Dewatering Plan.** This plan would outline the management, containment, and disposal of concrete debris, slurry, and dust and discuss BMPs that would be used to reduce high pH.

- Fugitive Dust Plan. This plan would outline measures to prevent generation of fugitive dust from exposed soil, construction traffic, and material stockpiles.

See discussion above in Shoreline analysis section regarding implementation of the Construction Stormwater Pollution Prevention Plan and the ECP. No additional mitigation for construction-related impacts to surface water quality pursuant to SEPA is warranted.

Drainage and Earth

The construction-related effects from this project on earth and groundwater and mitigation measures to address and minimize these effects are addressed in Appendix P (Earth Discipline Report) of the SEIS. Any additional information required to verify conformance with applicable ordinances and codes (The Stormwater Code and Director's Rule 16-2009) will be required prior to issuance of any required building permits or demolition permits. See discussion above in Shoreline analysis section regarding implementation of the Construction Stormwater Pollution Prevention Plan and the ECP.

No additional mitigation pursuant to SEPA is warranted.

Traffic and Parking

The construction-related effects related to traffic and parking are addressed in Appendix C of the SEIS (Transportation Discipline Report) and, more specifically, in Chapter 6 of that report, including reference to the Transportation Improvements to Minimize Traffic Effects During Construction, which has been developed by WSDOT, King County and City of Seattle. Further construction-related mitigation measures will be developed in a Traffic Management Plan that will be reviewed and approved by the City of Seattle. No additional mitigation pursuant to SEPA is warranted.

Noise

Construction-related impacts related to noise are addressed in Appendix F of the SEIS (Noise Discipline Report) and, more specifically, Chapter 6 of that report. Chapter 6 provides a list and discussion of mitigation measures to minimize the potential noise impacts of this project. Substantial nighttime activities are expected for this project, which will generate specific mitigation requirements from the Seattle Department of Planning and Development that will be specified in a noise variance to be issued by DPD (Project No. 3011620). Additional temporary noise variances may be required. No additional mitigation pursuant to SEPA is warranted.

Plants and Animals

Several significant construction activities for this project are concentrated at Terminal 46 and Pier 48, which are over and adjacent to the nearshore environment in Elliott Bay. These activities are described in more detail above and in the SEIS, in particular the Wildlife, Fish and Vegetation Discipline Report (Appendix N). Numerous marine fish species occur along the Seattle shoreline and Elliott Bay. These include ESA-listed fish species of Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*O. mykiss*), and bull trout (*Salvelinus*

confluentus). Nearshore marine areas of Elliott Bay are designated as Chinook salmon and bull trout critical habitat (USFWS 2005; NMFS 2005). Elliott Bay is also expected to support the three Georgia Basin rockfish species recently listed under the ESA: bocaccio (*Sebastes paucispinis*), and canary (*S. pinniger*), and yelloweye (*S. ruberrimus*) rockfish (NMFS 2010b). A more comprehensive list and discussion of affected aquatic and wildlife species potentially impacted by this project along the Seattle shoreline is contained in Appendix N of the 2010 SEIS.

Construction-related effects on natural resources (i.e., fish, wildlife and vegetation) are analyzed and discussed in more detail in Chapter 6 of Appendix N of the SEIS and summarized above in Shoreline discussion about potential fish and wildlife impacts. This chapter also contains mitigation measures that will be employed to minimize and mitigate for potential impacts to these resources. Appendix O (Surface Water Discipline Report) and Appendix Q (Hazardous Materials Discipline Report) also contain mitigation measures that will minimize and mitigate impacts to natural resources, primarily with respect to Best Management Practices that will be employed for protection of water quality and aquatic habitat during construction activities at Pier 48 and Terminal 46. See discussion above regarding implementation of Construction Stormwater Pollution Prevention Plan. No additional mitigation pursuant to SEPA is warranted.

Long Term Impacts

Several long-term or use-related impacts are anticipated as a result of approval of this proposal including impacts on air quality, surface water quality, and plants and animals.

Several adopted City codes and/or ordinances provide mitigation for some of the identified impacts. The Stormwater Code requires on-site collection of stormwater, with provisions for controlled tightline release to an approved outlet, and additional design elements to prevent isolated flooding. The Land Use Code controls site coverage, setbacks, building height and use, and contains other development and use regulations to assure compatible development. Generally, compliance with these applicable codes and ordinances is adequate to achieve sufficient mitigation of most long-term impacts. However, due to the nature of the proposal, some of the potential impacts warrant further analysis.

Air Quality

An operational effect of the project on air quality is addressed in the SEIS and, in particular, Chapter 5 of Appendix M (Air Discipline Report). No additional mitigation pursuant to SEPA is warranted.

Plants and Animals

Operational effects of the project on natural resources (i.e., fish, wildlife and vegetation) are analyzed and discussed in more detail in Chapter 5 of Appendix N of the SEIS (Fish, Wildlife and Vegetation Discipline Report). This chapter also contains mitigation measures that will be employed to minimize and mitigate for potential impacts to these resources. Appendix O (Surface Water Discipline Report) and Appendix Q (Hazardous Materials Discipline Report) also contain mitigation measures that will minimize and mitigate impacts to natural resources during operation of the proposed project, including measures that will be employed for consistency with City of Seattle's Stormwater Code that will serve to protect water and habitat quality for potentially affected plants and animals. No additional mitigation pursuant to SEPA is warranted.

Surface Water Quality

Operational effects of the project to surface water quality are analyzed and discussed in Chapter 5 of Appendix O of the SEIS (Surface Water Quality Discipline Report). This chapter addresses conventional water quality and peak flow control BMPs that will be employed as well as green stormwater infrastructure practices required by the City's Stormwater Code that will address potential adverse effects of the project to surface water quality during operation of the proposed tunnel. No additional mitigation pursuant to SEPA is warranted.

Other Impacts

Several adopted Codes and Ordinances and other Agencies will appropriately mitigate the other use-related adverse impacts created by the proposal, such as the Puget Sound Clean Air Agency and the Seattle Energy Code (long-term energy consumption).

Conclusion - SEPA

Environmental impacts for the proposal were identified and analyzed in the 2010 SDEIS and FEIS issued by WSDOT and the NEPA Record of Decision. While DPD has the authority to mitigate impacts pursuant to the city's SEPA practices, existing City codes and regulations are adequate to achieve sufficient mitigation for the proposal's environmental impacts. The Director hereby incorporates by reference the mitigation measures and commitments in the Bored Tunnel Alternative FSEIS. A summary of these mitigation measures is in the project file (Attachment A). No additional SEPA conditions are required.

CONDITIONS –SHORELINE

Prior to Building Permit Issuance

1. The Construction Stormwater Pollution Prevention Plan for this project and all appendices to this Plan, as described in the Surface Water Discipline Report (Appendix O), as well as any Contaminated Soils Management Plans relevant to construction or handling of materials in the Shoreline District (e.g., staging, stockpiling, handling, transporting of excavated soils and/or demolition debris at Terminal 46 or Pier 48) shall be completed and provided to DPD for review and comment and referenced on all building permit plans for this project.
2. The Environmental Compliance Plan, summarized above in the Shoreline analysis section, shall be completed and provided to DPD for review and comment and referenced on all building permit plans for this project.
3. Building permit plans should clearly show lighting plan for all proposed work at Pier 48 and Terminal 46 that indicates specific measures (e.g., shielding, low-wattage bulbs, location and placement of light fixtures, operational BMPs, etc.) to be taken to prevent and minimize light spillage into adjacent aquatic habitat during construction activities. This plan should also clearly indicate any lights that will remain following the end of construction of this project.

During Construction

All Shoreline Conditions specified below shall be enforced during construction and shall be posted at the site in a location on the property line that is visible and accessible to the public and to construction personnel from the street right-of-way. The placards will be issued along with the building permit set of plans. The placards shall be laminated with clear plastic or other waterproofing material and shall remain posted on-site for the duration of the construction.

4. All exterior light fixtures at Pier 48 and Terminal 46 that are installed for purposes of this project (temporary or permanent) shall be operated and physically shielded to the extent feasible to prevent light spillage into the adjacent aquatic habitat.
5. The contractor and applicant shall be responsible for compliance with the ECP and the Construction Stormwater Pollution Prevention Plan, including all best management plans in the appendices for this plan, as summarized and described above and in the Surface Water Discipline Report (Appendix O).
6. The contractor and applicant shall be responsible for compliance with any approved Noise Variances.
7. The contractor and applicant shall be responsible for compliance with Contaminated Soils Management Plans developed for handling and disposal of hazardous material.

For Life of the Project

8. All operational Best Management Practices identified in the 2010 SDEIS and FEIS for this project and associated Discipline Reports shall be implemented and enforced.

Signature: _____ (signature on file)
Ben Perkowski, Land Use Planner
Department of Planning and Development

Date: August 25, 2011